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# NOTICE OF ALLOWANCE AND FEE(S) DUE

23552

7590

04/23/2009

MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903 EXAMINER

BOYCE, ANDRE D

ART UNIT PAPER NUMBER

3623

DATE MAILED: 04/23/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,440	08/20/2003	Bruce J. Thompson	40I34.000IUSII	7989

TITLE OF INVENTION: METHOD AND SYSTEM FOR OPTIMIZING EMPLOYEE SCHEDULING IN A PATIENT CARE ENVIRONMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	07/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

ndicated unless correcte maintenance fee notifica		nerwise in Block I, by (				arate "FEE ADDRESS" for
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use BI	ock 1 for any change of address)	Feet pape	(s) Transmittal. This cer	tificate cannot be used : er, such as an assignme	or domestic mailings of the for any other accompanying ent or formal drawing, must
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MERCHANT P.O. BOX 2903 MINNEAPOLIS	& GOULD PC 5, MN 55402-0903		I he Stat addi tran	reby certify that this Fe	ate of Mailing or Transec(s) Transmittal is bein ufficient postage for fire to ISSUE FEE address (71) 273-2885, on the co	smission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATT	ORNEY DOCKET NO.	CONFIRMATION NO.
10/645,440	08/20/2003		Bruce J. Thompson		40134.0001US11	7989
			EMPLOYEE SCHEDULI		_	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	E DATE DUE
nonprovisional	YES	\$755	\$300	\$0 1	\$1055	07/23/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	J		
BOYCE, A		3623	705-008000			
Change of correspondence address or indication of "Fee Address" (37 EFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2. For printing on the patent front page, list  (I) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.			
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comp GNEE		(B) RESIDENCE: (CITY	atent. If an assignee is assignment. 7 and STATE OR COUN	VTRY)	locument has been filed for oup entity
☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).			
	tus (from status indicate is SMALL ENTITY state		☐ b. Applicant is no lon	ger claiming SMALL D	VTITV status Sec 27.0	FR 1.27(a)(2)
NOTE: The Issue Fee an	d Publication Fee (if req	uired) will not be accepte	d from anyone other than t			he assignee or other party in
nterest as shown by the	records of the United Sta	tes Patent and Trademark	Office.			
Authorized Signature				Date		
Typed or printed name						
This collection of inform in application. Confiden ubmitting the complete his form and/or suggesti 30x 1450, Alexandria, V Alexandria, Virginia 223	d application form to the ions for reducing this bu 'irginia 22313-1450. DC	CFR 1.311. The information U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiving Chief Information Office COMPLETED FORMS TO	retain a benefit by the purimated to take 12 minuted to take 12 minuted to take 12 minuted case. Any commert, U.S. Patent and Trade of THIS ADDRESS. SE	blic which is to file (an es to complete, includi- nts on the amount of ti emark Office, U.S. Dep ND TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450,

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10/645,440	08/20/2003	Bruce J. Thompson	40134.0001US11 7989		
23552 7590 04/23/200			EXAMINER		
MERCHANT &	GOULD PC	BOYCE, ANDRE D			
P.O. BOX 2903				PAPER NUMBER	
MINNEAPOLIS, MN 55402-0903			3623		
			DATE MAILED: 04/23/2009		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1174 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1174 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
		THOMPSON ET AL.	
Notice of Allowability	10/645,440 Examiner	Art Unit	<u>.</u>
	Andre Boyce	3623	<u> </u>
The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313 1. \( \sum \) This communication is responsive to \( \frac{Applicant's After Finally 1}{2} \)	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to 3 and MPEP 1308.	plication. If not include n will be mailed in due o o withdrawal from issu	ed course. <b>THIS</b>
2. X The allowed claim(s) is/are <u>1-12,14-16,18-21 and 25-40</u> .			
<ol> <li>Acknowledgment is made of a claim for foreign priority ur</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).</li> </ol> * Certified copies not received:	be been received. be been received in Application No		tion from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the req	quirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>			OTICE OF
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers		948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the C	Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the drawing the header according to 37 CFR 1.121(	ngs in the front (not the d).	back) of
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL r	nust be submitted. N	Note the
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal F 6. ☐ Interview Summary Paper No./Mail Da 7. ☐ Examiner's Amendr 8. ☒ Examiner's Stateme 9. ☐ Other	(PTO-413), te ment/Comment	wance
/Andre Boyce/ Primary Examiner, Art Unit 3623			

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## **DETAILED ACTION**

## Response to Amendment

1. This office action is in response to Applicant's After final amendments filed 2/6/09 and 3/30/09. Claims 1, 12, 15, 16, 25, 33 and 36 have been amended. Claims 1-12, 14-16, 18-21 and 25-40 are pending.

2. The previously pending objections to the specification and drawings have been withdrawn.

The previously pending rejections to claims 1-12, 14-16, 18-21 and 25-29 under 35 USC 112, second paragraph, have been withdrawn.

### Terminal Disclaimer

3. The terminal disclaimer filed on 3/30/09 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of USPN 7,457,765 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### Reasons for Allowance

- 4. Claims 1-12, 14-16, 18-21 and 25-40 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

With respect to independent claims 1, 25, 30 and 38, none of the prior art of record, taken individually or in any combination, teach inter alia, (i) determining in a

computer system the employees' patient care capability over intervals of their shift, wherein at least one employee is not capable of performing direct patient care duties for an entire shift; (ii) counting employees at a fractional number based at least upon the employees' training and a predetermined patient care capability resulting in scheduling employees in non-whole number increments; and (iii) rounding up a total amount of employees needed when a determination by a scheduling module results in a fractional number of employees needed to address the needs of the at least two (plurality of) patients.

 The prior art references most closely resembling Applicant's claimed invention are Hirsch et al (WO 97/25682), Leamon (USPN 6,970,829), and Rosse (USPN 6,640,212).

Hirsch et al discloses dedicated management system that schedules and optimizes utilization of operating room suite resources (pg 7, lines 26-29), patient record including proposed medical procedure (pg 15, lines 26-29) and hospital policies such as proactive and reactive emergency policies used as goals and constraints (pg 18, lines 28-30 and pg 19, lines 1-3).

Leamon discloses the net staff arrays provide, for each time interval to be scheduled, the number of agents (usually a fractional amount) over (if positive) or under (if negative) the total needed to cover all of or a portion of agent requirements for that interval, and as scheduling proceeds, the net staff for a given interval may be fractional, it may be negative if the interval is understaffed or positive if the interval is

already over-staffed (column 16, lines 51-58), including a net staff array associated with minimum skill level (column 17, lines 1-13).

Rosse discloses assigning staff schedules, wherein the selected staff for a specific assignment includes the percent of shift assigned (i.e., the capability of assigned staff over entire shift, figure 15).

However, none of the cited prior art discloses (i) determining in a computer system the employees' patient care capability over intervals of their shift, wherein at least one employee is not capable of performing direct patient care duties for an entire shift; (ii) counting employees at a fractional number based at least upon the employees' training and a predetermined patient care capability resulting in scheduling employees in non-whole number increments; and (iii) rounding up a total amount of employees needed when a determination by a scheduling module results in a fractional number of employees needed to address the needs of the at least two (plurality of) patients.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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### Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Ho et al (Introducing variable-interval appointment scheduling rules in service systems) disclose appointment scheduling rules to reduce customer wait time.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571)272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andre Boyce/ Primary Examiner, Art Unit 3623 April 20, 2009